

## Appointment

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**From:** Bolt, Matthew [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2456E92CF5334FA5B89AF3DBB9A69119-BOLT, MATTH]  
**Sent:** 5/18/2017 8:02:19 PM  
**To:** Bolt, Matthew [Bolt.Matthew@epa.gov]; Jade Dickens [Dickens.Jade@azdeq.gov]; Kyle W. Palmer [Palmer.Kyle@azdeq.gov]  
**CC:** Sablad, Elizabeth [Sablade.Elizabeth@epa.gov]; Vollmer, Jared [Vollmer.Jared@epa.gov]; Jason W. Sutter [Sutter.Jason@azdeq.gov]  
**BCC:** R9SF-ConferenceLine-WTR-Card1 [R9SF-ConferenceLine-WTR-Card1@epa.gov]; R9SF-Room-15420-4-SmithRiver [R9SF-Room-15420-4-SmithRiver@epa.gov]  
**Subject:** Status of Queen Creek  
**Location:** R9SF-ConferenceLine-WTR-Card1; R9SF-Room-15420-4-SmithRiver  
**Start:** 5/26/2017 5:30:00 PM  
**End:** 5/26/2017 6:30:00 PM  
**Show Time As:** Busy

**Dial-In Number(s):**

**Conference Code:**

Conference Line/Code / Ex. 6

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**From:** Jade Dickens [mailto:Dickens.Jade@azdeq.gov]  
**Sent:** Thursday, May 18, 2017 12:28 PM  
**To:** Bolt, Matthew <Bolt.Matthew@epa.gov>; Kyle W. Palmer <Palmer.Kyle@azdeq.gov>  
**Cc:** Sablad, Elizabeth <Sablade.Elizabeth@epa.gov>; Vollmer, Jared <Vollmer.Jared@epa.gov>; Jason W. Sutter <Sutter.Jason@azdeq.gov>  
**Subject:** RE: Status of Queen Creek

How about Wednesday at 11:30?

Jade Dickens  
Supervisor, Watershed Protection Unit  
Arizona Department of Environmental Quality  
[jd11@azdeq.gov](mailto:jd11@azdeq.gov)  
(602)771-4115

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**From:** Bolt, Matthew [mailto:Bolt.Matthew@epa.gov]  
**Sent:** Thursday, May 18, 2017 10:35 AM  
**To:** Jade Dickens <Dickens.Jade@azdeq.gov>; Kyle W. Palmer <Palmer.Kyle@azdeq.gov>  
**Cc:** Sablad, Elizabeth <Sablade.Elizabeth@epa.gov>; Vollmer, Jared <Vollmer.Jared@epa.gov>; Jason W. Sutter <Sutter.Jason@azdeq.gov>  
**Subject:** RE: Status of Queen Creek

Hi Jade and Kyle,

The original questions were more drafted as jumping off points to frame the call. Below are more specific questions that may be better suited for written response.

1. How were the unnamed tributaries' designated uses determined as ephemeral, as opposed to warm water? Reference: R18-11-105 tributaries; designated uses
2. The hardness numbers have been updated, what data was excluded and included for this update? What was the error being corrected in the hardness data that was originally used? Was the copper model updated with the new hardness data?
3. How can we support you on this in future hardness based TMDLs? Would an agreement on TMDL early engagement or on technical engagement to streamline this process be useful at this time?
4. Can you walk us through how the copper modeling was done? How the overland flow from oak flat was determined to be a major contributor? Which data drove this conclusion?
5. Given the likelihood that this area will see a substantial amount of growth and disturbance through the proposed mine, what is the benefit of choosing an implied margin of safety? Would an explicit MOS make this a more robust TMDL?
6. The formula included in the TMDL is " $TMDL = \sum WLA + \sum LA + NB + MOS$ " so the loading is already allotted to the WLA, it does not seem appropriate to double count it under the MOS; effectively relying on a permittee to not use their full allotment. How much of the MOS did the unused portion of the WLA represent?
7. We have a concern about the 319(h) paragraph, suggested language is forthcoming. We want to preserve all flexibility for ADEQ to tackle legacy and permanently inactive mine contributions.

Matt, Jared, and Elizabeth availability next week: Monday until 10-noon or 1:30p-2:30p; Wednesday 10a-1p; Friday 10-noon. How does this compare for you all? Should we move it out to the following week?

Thank You,  
Matt

Matthew Bolt  
Life Scientist  
Water Quality Assessment Section  
US EPA Region 9  
75 Hawthorne Street (WTR-2-1)  
San Francisco, CA 94105-3901  
(415) 972-3578

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**From:** Jade Dickens [<mailto:Dickens.Jade@azdeq.gov>]  
**Sent:** Thursday, May 18, 2017 8:31 AM  
**To:** Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>  
**Cc:** Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>; Jason W. Sutter <[Sutter.Jason@azdeq.gov](mailto:Sutter.Jason@azdeq.gov)>  
**Subject:** RE: Status of Queen Creek

Hi everyone,

Due to scheduling conflicts, I think it would be best to reschedule this meeting for next week. I apologize for the late notice. ADEQ will draft up written responses to EPA's questions and provide those in writing by early next week to help the discussion.

Thank you all for your understanding.  
Jade Dickens

Supervisor, Watershed Protection Unit  
Arizona Department of Environmental Quality  
[jd11@azdeq.gov](mailto:jd11@azdeq.gov)  
(602)771-4115

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**From:** Bolt, Matthew [<mailto:Bolt.Matthew@epa.gov>]  
**Sent:** Monday, May 15, 2017 6:49 PM  
**To:** Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>  
**Cc:** Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>  
**Subject:** RE: Status of Queen Creek

Hi Jade and Kyle,

The main concerns/questions I have are:

Can you walk me through how the unnamed tributaries' designated uses determined as ephemeral?

The hardness numbers have been updated, what data was excluded and included for this update? What was the error being corrected? How can we support you on this in future hardness based TMDLs?

Can you walk me through how the copper modeling was done and how the overland flow from oak flat was determined to be a major contributor? Was the copper model updated with the new hardness data?

Given the likelihood that this area will see a substantial amount of growth and disturbance through the proposed mine, what is the benefit of choosing an implied margin of safety and/or would an explicit MOS make this a more robust TMDL?

I am very uncomfortable with forecasting that the unused portion of the already permitted WLAs will remain unused in part or in whole and thus available as a MOS; effectively relying on a permittee to not use their full allotment. What other options can be considered here?

There is concern about the 319(h) paragraph, suggested language is forthcoming. I want to preserve all flexibility for ADEQ to tackle legacy and permanently inactive mine contributions.

I can setup a call.

Thank You,  
Matt

Matthew Bolt  
Life Scientist  
Water Quality Assessment Section  
US EPA Region 9  
75 Hawthorne Street (WTR-2-1)  
San Francisco, CA 94105-3901  
(415) 972-3578

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**From:** Jade Dickens [<mailto:Dickens.Jade@azdeq.gov>]  
**Sent:** Monday, May 15, 2017 3:49 PM  
**To:** Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>  
**Cc:** Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>  
**Subject:** RE: Status of Queen Creek

Hi Matt,

Maybe you could send us your questions in advance so we can be prepared for a teleconference? We can have a chance to look them over and prepare for the phone call.

Thanks!

Jade Dickens

Supervisor, Watershed Protection Unit

Arizona Department of Environmental Quality

[jd11@azdeq.gov](mailto:jd11@azdeq.gov)

(602)771-4115

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**From:** Bolt, Matthew [<mailto:Bolt.Matthew@epa.gov>]

**Sent:** Monday, May 15, 2017 3:43 PM

**To:** Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>

**Cc:** Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>

**Subject:** RE: Status of Queen Creek

Hi Kyle and Jade,

We do have some questions about the updated TMDL. Would email or a teleconference be better for you all?

One housekeeping item: table 15 on page 43 notes modelling reach #25 which does not appear in Figure 5 on page 23.

Thank You,

Matt

Matthew Bolt

Life Scientist

Water Quality Assessment Section

US EPA Region 9

75 Hawthorne Street (WTR-2-1)

San Francisco, CA 94105-3901

(415) 972-3578

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**From:** Bolt, Matthew

**Sent:** Wednesday, May 10, 2017 5:00 PM

**To:** 'Kyle W. Palmer' <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>

**Cc:** Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>

**Subject:** RE: Status of Queen Creek

Hi Kyle,

We are reviewing the updated Queen Creek TMDL draft document and will have comments/concerns soon.

Thank You,

Matt

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**From:** Kyle W. Palmer [<mailto:Palmer.Kyle@azdeq.gov>]

**Sent:** Wednesday, May 10, 2017 11:20 AM

**To:** Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>

**Cc:** Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>

**Subject:** RE: Status of Queen Creek

Matthew,

I have gotten some inquiries during the week about the status of the Queen Creek draft TMDL and I was wondering if you could provide me with an update so I can pass it along to the concerned parties. Thanks for checking on this for me.

Kyle

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**From:** Bolt, Matthew [<mailto:Bolt.Matthew@epa.gov>]  
**Sent:** Friday, April 28, 2017 5:14 PM  
**To:** Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>  
**Cc:** Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>  
**Subject:** RE: Status of Queen Creek

Hi Jade,

Thank you for checking in on the status of the Queen Creek TMDL. I am hoping to provide feedback, before the end of next week, on this TMDL and the other simultaneous conversations that I had with you and other members of ADEQ during the midyear meeting week.

Thank You,  
Matt

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**From:** Jade Dickens [<mailto:Dickens.Jade@azdeq.gov>]  
**Sent:** Friday, April 28, 2017 11:00 AM  
**To:** Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>; Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>  
**Cc:** Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>  
**Subject:** Status of Queen Creek

Hi EPA,

I wanted to follow up on the status of the most recent Queen Creek TMDL we sent a couple of weeks ago. Please let us know if there are still concerns or if we can start moving forward on the public comment process.

Thanks!  
Jade Dickens  
Supervisor, Watershed Protection Unit  
Arizona Department of Environmental Quality  
[jd11@azdeq.gov](mailto:jd11@azdeq.gov)  
(602)771-4115